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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/336,229

06/18/1999

STEVEN R. WILLIS

AGM-005

7390

26615

7590

06/14/2004

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EXAMINER

HYUN, SOON D

ART UNIT

PAPER NUMBER

2663

19

DATE MAILED: 06/14/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/336,229

Applicant(s)

WILLIS, STEVEN R.

Examiner

Soon-Dong Hyun

Art Unit

2663

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 April 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3,6,7,11,13-15,19 and 20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 14,15,19 and 20 is/are allowed.
- 6) ☒ Claim(s) 1-3,11 and 13 is/are rejected.
- 7) ☒ Claim(s) 6 and 7 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. The indicated allowability of claims 1-3, 11, and 13 is withdrawn in view of the newly discovered reference(s) to Tezuka. Rejections based on the newly cited reference(s) follow.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1 and 2 are rejected under 35 U.S.C. 102(e) as being anticipated by Tezuka (U.S. Patent No. 6,331,989).

Regarding claim 1, Tezuka discloses a device for directing data toward destinations, comprising:

an input interface (demultiplexing circuit 12 and frame synchronization circuits 13-16); to receive a non-Asynchronous Transfer Mode (ATM) data stream (a multiplexed signal over an optical fiber 9 (col. 3, lines 52-59) from a single port (the port is not shown, but it is inherently required at the demultiplexing circuit 12 in FIG. 2, because the optical fiber is coupled to the demultiplexing circuit 12 thru the port), the non-ATM data stream including synchronous optical network (SONET) frames (col. 3, lines 15-24); to identify ATM cells and Internet Protocol (IP) packets within the non-ATM data stream, and forward the ATM cells and IP packets (by frame synchronization circuits 13-16);

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a SONET deframer to deframe the SONET frames in the non-ATM data stream, the SONET deframer is not shown, but it is inherently required for further processing of STM-1 frame (col. 6, lines 45-55);

an IP packet forwarding facility (switch 17) to receive IP packets from the input interface, and forward the IP packets toward their destinations; and

an ATM cell switching facility (switch 17) to receive ATM cells from the input interface, and switch the ATM cells toward their destinations.

Regarding claim 2, Tezuka does not explicitly teach a housing for the switch, but it is inherently required for protection.

Regarding claim 3, further comprising an application specific integrated circuit (ASIC) that contains at least a portion of both the IP packet forwarding facility and the ATM cell switching facility.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 3, 11 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tezuka (U.S. Patent No. 6,331,989).

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Regarding claim 3, Tezuka does not explicitly teach that the switch is an ASIC. It would have been obvious to one having ordinary skill in the art to incorporate the switch of Tezuka into an ASIC to make a circuitry including the switch as compact as possible.

Regarding claims 11 and 13, Tezuka discloses a device for directing input data traffic received on an input port (demultiplexing circuit 12 in FIG. 2 and frame synchronization circuits 13-16) to output ports (output ports of a switch 17), a method comprising:

receiving a non-Asynchronous Transfer Mode (ATM) data stream at the input port;

identifying Internet Protocol (IP) packets and ATM cells in the received non-ATM data stream (by frame synchronization circuits 13-16);

directing (by the switch 17) an identified IP packet that is received on the one input port to at least one of the output ports based on an IP lookup operation (detecting a predetermined sync pattern by frame synchronization circuits 13-16 is equivalent to the look-up operation, col. 6, lines 16-25); and

directing (by the switch 17) an identified ATM cell that is received on the one input port to at least one of the output ports based on an ATM lookup operation (by frame synchronization circuits 13-16 and switch 17), wherein the device includes a Synchronous Optical Network (SONET) deframer and wherein the SONET deframer is used to deframe any SONET frames in the non-ATM data stream received at the one input port, the SONET deframer is not shown, but it is inherently required for further processing of STM-1 frame (col. 6, lines 45-55).

However, Tezuka does not explicitly teach a plurality of input ports. Those of skill in the art would have been motivated to incorporate a plurality of demultiplexing circuits to receive

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more data streams. Therefore, it would have been obvious to one having ordinary skill in the art to incorporate a plurality of input ports into Tezuka.

Allowable Subject Matter

6. Claims 14, 15, 19 and 20 are allowed.
7. Claims 6 and 7 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Soon-Dong Hyun whose telephone number is (703) 305-4550. The examiner can normally be reached on Monday-Friday from 8:30 A.M. to 5:30 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chau Nguyen, can be reached on (703) 308-5340.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 305-3900.

9. Any response to this action should be mailed to:

Commissioner for Patents

P.O. Box 1450

Alexandria, VA 22313-1450

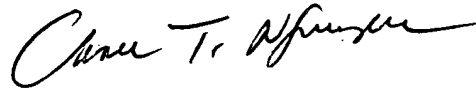
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Or faxed to: 703-872-9306 for formal communications intended for entry with a label of
"OFFICIAL" and for informal or draft communications with a label of "PROPOSED" or
"DRAFT" (attn: Art Unit 2663, Soon-Dong Hyun).



S. Hyun

05/24/2004



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